

preformed latticed tube bottoms in which ends of said rectangular tubes are arranged such that said rectangular tubes form a bundle, said ends of the rectangular tubes and said tube bottoms forming a weld joint therebetween;

a sheet metal jacket arranged around said bundle and attached to said tube bottoms, said sheet metal jacket being provided with a coolant inlet and a coolant outlet to allow a liquid coolant to flow around said rectangular tubes in said sheet metal jacket; and

[flange plates] connections attached to ends of said sheet metal jacket and configured for attachment to an exhaust pipe communicated with the exhaust gas from the internal-combustion engine, each of said [flange plate] connections defining a central opening which communicates said rectangular tubes with the exhaust pipe.

2. (Amended) A heat exchanger according to Claim 1, wherein [the ends of the rectangular tubes are welded to the tube bottoms,] the sheet metal jacket [is welded to] and the tube bottoms form a weld joint therebetween, and the [flange plates] connections [are welded to] and the ends of the sheet metal jacket form a weld joint therebetween.

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3. (Amended) A heat exchanger according to Claim 1, wherein the rectangular tubes are each formed of two tube halves which form a weld joint therebetween [are welded together].

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5. (Amended) A heat exchanger according to Claim 4, wherein the lugs [are welded onto] and the tube halves form a weld joint therebetween.

A₃
9. (Amended) A heat exchanger according to Claim 1, wherein the rectangular tubes are provided with spacing elements facing respective adjacent ones of said rectangular tubes.

10. (Amended) A heat exchanger according to Claim 1, wherein the [flange plates] connections are provided with threaded sleeves in areas which are essentially mutually diametrically opposite.

11. (Amended) A heat exchanger according to Claim 1, wherein the coolant inlet is arranged proximate the [flange plate] connection which is in the front in the flow direction of the exhaust gas and the coolant outlet is arranged proximate the [flange plate] connection which is in the rear in the flow direction of the exhaust gas.

94 15. (Amended) A heat exchanger according to Claim 13, wherein a water chamber is formed between each [flange plate] connection and a respective [of the] holding [webs] web in the area of the openings of the connection tubes and of the sheet metal jacket.

16. (Amended) A heat exchanger according to Claim 15, wherein the connection tubes are arranged as an extension of one threaded sleeve respectively which is closed on [its] a rearward end, and wherein said water chamber is formed between each threaded sleeve and a respective one of the connection tubes by a cover plate extending from the [flange plate] connection to the holding web.

95 18. (Amended) A heat exchanger according to Claim 1, wherein the [flange plates] connections fittingly engage the sheet metal jacket by way of joint connections.

19. (Amended) A heat exchanger according to Claim [1] 10, wherein the threaded sleeves fittingly engage the [flange plates] connections by way of joint connections.

Sub C2
20. (Amended) A heat exchanger for cooling exhaust gas of an internal-combustion engine, comprising:

a plurality of tubes for guiding exhaust gas;

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first and second preformed latticed tube bottoms, each tube bottom defining a plurality of openings corresponding to an outer periphery of respective of said tubes, first and second axial ends of each of said tubes being arranged in respective of said openings in said first and second tube bottoms such that said tube bottoms support said tubes substantially parallel to one another and spaced-apart from one another in a bundle, said ends of the tubes and said tube bottoms forming a weld joint therebetween;

a sheet metal jacket concentrically surrounding said bundle and attached to said tube bottoms, said sheet metal jacket and said tube bottoms defining a chamber, said sheet metal jacket being provided with a coolant inlet and a coolant outlet to allow a liquid coolant to enter said chamber, flow around an exterior surface of said tubes in said chamber, and exit said chamber; and

[flange plates] connections attached to ends of said sheet metal jacket and configured for attachment to an exhaust pipe communicated with the exhaust gas from the internal-combustion engine, each of said [flange plate] connections defining an opening which communicates an interior of said tubes with an interior of said exhaust pipe.

22. (Amended) A method of manufacturing a heat exchanger for cooling exhaust gas of an internal-combustion engine, said method comprising the steps of:

providing a plurality of rectangular tubes for guiding exhaust gas;

attaching a plurality of lugs to said rectangular tubes diagonally to a flow direction of the exhaust gas, said lugs being arranged in pairs;

providing first and second preformed latticed tube bottoms;

[attaching] welding ends of said rectangular tubes to said latticed tube bottoms such that said rectangular tubes form a bundle;

attaching a sheet metal jacket to said tube bottoms and around said bundle;

providing said sheet metal jacket with a coolant inlet and a coolant outlet to allow a liquid coolant to flow around said rectangular tubes in said sheet metal jacket; and

attaching [flange plates] connections to ends of said sheet metal jacket, said [flange plates] connections being configured for attachment to an exhaust pipe communicated with the exhaust gas from the internal-combustion engine, each said [flange plate] connection defining a central opening which communicates said rectangular tubes with the exhaust pipe.